

WHAT IS CLAIMED IS:

1. A method for processing analytes in a first solution containing charged particles, wherein the first solution is filling a compartment having reservoirs, the method comprising:
 - 5 A) subjecting said compartment to an electric field, so that the charged particles are mainly moved into the reservoirs, thereby reducing the amount of the charged particles in a part of the first solution, which is located in a section of the compartment,
 - 10 B) subjecting said part of the first solution obtained in A) containing the analytes to further processing.
2. The method according to claim 1, comprising at least one selected from the group consisting of:
 - an alternating electric field is applied in A);
 - an alternating voltage of 0,1 to 5 Hz is applied in A);
 - 15 - the polarity of an alternating electric field is changed roughly two times in A).
3. The method according to claim 1, wherein the analytes have a lower electrophoretic mobility than the particles.
4. The method according to claim 1, wherein a conduit having the
20 reservoirs at its end points is used as a compartment containing the first solution.
5. The method according to the previous claim, wherein the reservoirs of the conduit are filled with at least one solution selected from the group consisting of:

a second solution containing a lower concentration of the charged particles than the first solution; and

low conductivity buffer or deionized water.

6. The method according to claim 1, wherein the amount of at least one charged particles selected from the group of salts, buffer molecules, nucleotides and amino acids, organic dyes, is reduced in A).

7. The method according to claim 1, wherein in B) the analytes are analyzed by at least one The method selected from the group consisting of: capillary electrophoresis, capillary gel electrophoresis, chromatography, isoelectric focussing and SDS-PAGE.

8. The method according to claim 1, wherein a microfluidic device having conduits is used for A) and B).

9. The method according to claim 1, further comprising:

a first conduit for carrying out A) and a second conduit for carrying out B), wherein said second conduit runs diagonally to the first conduit having a junction with the first conduit.

10. The method according to claim 1,

wherein in A) the first solution is applied into the first conduit and an alternating electric field is applied to said first conduit, thereby reducing the amount of the charged particles in the part of the first solution being located around the junction, and

wherein in B) the part of the first solution being located around the junction is introduced into the second conduit by applying a force to said second conduit, the force being at least one selected from the group consisting of: pressure driven flow, evaporation driven flow,

gravitational force, centrifugal force, capillary force and electric energy.

11. The method according to claim 1, wherein in A) the electric field is applied across the endpoints of a conduit filled with the first solution, thereby reducing the amount of the charged particles substantially in the middle section of the conduit.

12. Use of a microfluidic device for a method according to claim 1.

13. An apparatus for processing analytes contained in a first solution including charged particles, comprising:

10 a first compartment having reservoirs and being adapted for receiving the first solution, and

a first source of electric energy adapted for subjecting a part of the first solution in the compartment to an alternating electric field, so that the charged particles are mainly moved into the reservoirs, thereby reducing the amount of the charged particles in said part of the first solution.

14. The apparatus according to claim 13, further comprising:

a second compartment having a junction with the first compartment; and

20 a second source of energy selected from the group consisting of: sources generating pressure, centrifugal force, gravitational force, electric energy and capillary force.

15. The apparatus according to claim 13, further comprising:

25 a substrate with conduits formed therein, the conduits having wells at their end points, and

a first conduit as the first compartment and a second conduit as a second compartment, the first and second conduit having a first junction.

16. The apparatus according to claim 15, further comprising:

5 at least one third conduit for introduction of the first solution into the device, the third conduit having a second junction with the first conduit, wherein the distance between the second junction and the nearest end point of the first conduit being equal or smaller than the distance between the first junction and the second junction.

10 17. The apparatus according to claim 15, further comprising:

 an fourth conduit having a third junction with the first conduit, wherein the distance between the second junction and the nearest end point of the first conduit and the distance between the third junction and the nearest end point of the first conduit are both being equal or smaller
15 than the distance between the second and the third junction.

18. The apparatus according to claim 15, wherein the first junction comprises a double T-junction.